MAINTENANCE PLAN

HOMEOWNER'S ASSOCIATION

Subject: xx

SUCH PROPERTY BEING THE REAL PROPERTY NOW DULY PLATTED AS THE XX, AS SUCH PLAT IS NOW RECORDED AS DOCUMENT NO. 4892063, IN THE OFFICE OF THE RECORDER OF DEEDS OF THE COUNTY OF LAKE, STATE OF ILLINOIS, HEREBY MAKES THE FOLLOWING DECLARATIONS OF MAINTENANCE RESPONSIBILITIES.

REFER TO ATTACHED EXHIBIT A

Reference: Watershed Development Permit Ordinance – Section 3.11

Stormwater Management System Maintenance

Responsibilities

Adequate provisions for maintenance of the residential stormwater system are an essential aspect of residential communities long-term drainage performance. Responsibility for the overall maintenance shall rest with the Subdivision Homeowner's Association. Responsibility for maintenance of the grassy surface areas, which form part of the Watershed Drainage provision of the covenants, shall be the specific responsibility of the individual homeowner. Individual homeowners shall also be responsible for cooperating in the overall maintenance, as it may be required in the performance of the overall maintenance, for which the Subdivision Homeowner's Association has the ultimate responsibility.

Subdivision Homeowner's Association Covenants and Bylaws shall delineate the legal agreement establishing the Homeowner's Association's responsibilities for the enforcement and accomplishment of the attached prescribed maintenance requirements, which shall be considered part of the Covenant and Bylaws provisions. Please reference Exhibit A that denotes the areas where maintenance activities are required.

Purpose and Objective:

Adequate drainage must be maintained to keep water away from the roadway and the residential lots adjacent to the detention pond.

Maintenance Program: Significant elements and aspects provided as an attachment hereto prescribes the program for the surface and subsurface elements. The maintenance is supplemented by repair as required or replacement as the case may be, depending on the wear and tear of the provisions of the drainage elements.

Maintenance Considerations:

Cleaning and repairing culverts, outflow pipes, and manholes is to be particularly guarded inasmuch as those elements are not visually obvious, as are the surface area elements. If these subsurface elements become clogged, then water may flood the pavement surface and may cause extensive erosion damage or water flow blockage. It is therefore stated that the culvert, outflow pipe, and manhole cleaning be made a routine maintenance activity which should be scheduled for several times a year, and may also need to be carried out on an asneeded basis. Experience will show the required cleaning frequencies for specific drainage items.

Cost Considerations:

Maintenance and replacement needs and costs should be part of the economic analysis. Frequent maintenance program work execution will lead to less frequent and less costly long term maintenance and repair, possibly requiring replacement. The attached maintenance provisions may need to be adjusted based on experience recorded over the initial period of occupancy of the subdivision.

Record Keeping:

Separate and distinct records shall be maintained by the Subdivision Homeowner's Association, for all tasks performed associated with this plan. The records shall include the dates of maintenance visits and the specific work performed.

Interpretation as to Requirements Under This Maintenance Plan:

The requirement for this Maintenance Plan is generated by the Lake County Watershed Development Ordinance. Therefore, the interpretation of the maintenance requirements set forth in this Maintenance Plan shall be interpreted on the basis of the intent and requirements of said Ordinance. Specific areas of concern are identified on the attached Exhibit.

General -

 Litter and debris shall be controlled
 Accumulated sediment shall be disposed of properly, along with any wastes
generated during maintenance operations
 Riprap areas shall be repaired with the addition of new riprap, as necessary, of
similar size and shape
Roads can be swept, vacuumed and washed on periodic basis.

Storage Facilities (**Detention and Water Quality Treatment Facilities**) – The inlet and outlet of the pond should be checked periodically to ensure that the flow structures are not blocked by debris and cleaned as necessary. The outlet control structure, restrictors, should be inspected on a monthly basis and any debris near the orifice shall be immediately

removed. All ditches or pipes connecting ponds in series should be checked for debris that may block flow. Inspections should be conducted monthly during wet weather conditions from March to November.

Dam, berms and levees	
Settlement, repair	
Any breaks, hire Registered Professional Engineer for design resolution	
Erosion, repair	
Signs of piping (leakage), repair	
Signs of seepage or wet spots on the downstream face of a dam, may require toe	
drains or chimney drains to solve problems	
Shorelines	
Erosion and rip-rap failures, repair	
Undermining, repair	
Damage or deterioration, repair	
Principal and emergency outlets	
Obstructions blocking outlet pipe, channel or spillway, remove	
Condition of outlet and inlet structure	
Signs of seepage, repair	
Separation of joints, repair	
Cracks, breaks, or deterioration of concrete, repair	
Differential settlement, repair	
Scour and erosion at outlet, repair and reseed	
Any ice damage to outlet of pipe, repair if necessary	
Condition of trash tracks, remove debris	
Gates or Valves	
Damage by debris, ice, or freezing	
Outlet channel conditions downstream	
Flap gate performing adequately	
Access for maintenance equipment	
Obstructions (woodpiles, sheds, vegetation)	
Safety Features	
Access controls to hazardous areas	
Fences	
Loose or damaged posts	
Loose or broken wires	
Accumulated debris in fences	
Condition of gates	
Signs	
Volume	
Facilities shall be inspected to ensure that the constructed volume for detention is	
maintained. No sediment, topsoil, or other dumping into the facility shall be	
allowed. If a detention facility includes specific locations designed to accumulate	,
sediment these locations should be dredged every 5-yrs or when 50% of the volument these locations should be dredged every 5-yrs or when 50% of the volument these locations should be dredged every 5-yrs or when 50% of the volument these locations are should be dredged every 5-yrs or when 50% of the volument these locations are should be dredged every 5-yrs or when 50% of the volument these locations are should be dredged every 5-yrs or when 50% of the volument the should be dredged every 5-yrs or when 5-yrs or when 5-yrs or when 5-yrs or when 5-yrs or	n
has been lost.	

	Wet ponds lose 0.5 - 1.0% of their volume annually. Dredging is required when accumulated volume loss reaches 15%, or approximately every 15-20 years.
Storn	Sewers and Collector System -
	Free draining into collection channels or catch basins Catch basins clean, remove sediment from when more than 50% of basin sump is filled. Culverts shall be checked for siltation deposit, clean out as necessary. Rim elevation for change, elevations shall be retained as constructed hire qualified person to bring back to grade as required.
Bridge	
	Any scouring around wing walls Any undermining of footings Debris or trash needs to be removed
Swale	es –
	Check dams, repair and replace as necessary Verify system (both drainage ditches and sideyard swales) are maintaining originally constructed design slope and cross-sectional area. If fill or sediment contributes to elevation changes in swale, regarding and reshaping shall be performed. Licensed surveyors shall be hired to lay-out and check grades. No landscaping, earthen fill, or other obstructions shall be allowed in the swales that would impede design drainage flow patterns. Rotogill bottom of dry swales if not drawing down within 48-hours
Veget	ation
	Need for planting, reseeding or sodding. Supplement alternative native vegetation if a significant portion has not established (50% of the surface area). Reseed with alternative grass species if original grass cover has not successfully established. Evidence of grazing, motorbikes or other vehicles, repair Check for invasive vegetation, remove where possible Need for cutting. Grass shall be cut to height within sidewayd swales and in drainage ditches to maintain appropriate aesthetic appearance and design velocity. It is highly recommended that all native grasses remain uncut. Dead or damaged grassy areas – Repair with sodding, seeding with fertilization or seeding with mulch. Annually burn native vegetation for first 3 years. If burning is not feasible high mowing (6" height) at least twice during first 2 years to control invasive weeds and promote natives establishment.
	Herbicide applications on an as-needed basis by a licensed applicator to control weed species. Usually 2 applications/year for at least first 2-3 years.

Buffers –	
	Inspect for evidence of erosion or concentrated flows through or around the buffer. All eroded areas should be seeded and mulched. A shallow stone trench should be installed as a level spreader to distribute flows evenly in any area showing concentrated flows.
	All existing undergrowth, forest floor duff layer, and leaf litter must remain undisturbed except in allowed paths or permitted encroachment areas.
	No cutting is allowed of trees except for normal maintenance of dead, windblown, and damaged trees or; the culling of invasive, noxious or nonnative species that are to be replaced by more desirable and native vegetation.
	A buffer must maintain a dense, complete and vigorous cover of "non-lawn" vegetation which can be mowed no more than once a year. Vegetation may include grass and other herbaceous species as well as shrubs and trees.
	Activity within the buffer shall be conducted so as to prevent damage to vegetation and exposure of soil.
	the owner's agent, has caused these presents to be signed and acknowledged,
this	day of, 2
	Bv: